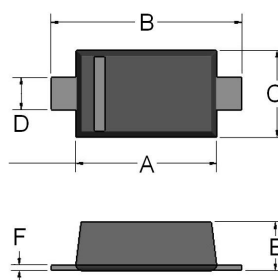


SURFACE MOUNT
Small Outline Flat Lead Plastic Package
High Voltage Switching Diode
REVERSE VOLTAGE – 250 Volts
FORWARD CURRENT – 0.2 Ampere
FEATURES

- Moisture Sensitivity Level 1
- Flat Lead SOD-323F Small Outline Plastic Package
- Surface device type mounting
- Green EMC
- Matte Tin(Sn) Lead Finish
- RoHS compliant
- Band Indicates Cathode

MECHANICAL DATA

- Polarity: Color band denotes cathode

SOD-323F


SOD-323F		
DIM.	MIN.	MAX.
A	1.60	1.80
B	2.30	2.70
C	1.15	1.35
D	0.25	0.40
E	0.80	1.00
F	0.05	0.25
All Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAV21WSF	Units
Maximum Repetitive Reverse Voltage	V _{RRM}	250	V
Non-Repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 μsecond	I _{FSM}	1 4	A
Power Dissipation	P _D	200	mW
Operating Temperature Range	T _J	+150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C
Average Rectified Forward Current	I _F (AV)	200	mA

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	BAV21WSF	Unit
Breakdown voltage	I _R =100uA	BV	250	V
Maximum Forward Voltage	I _F = 100mA I _F = 200mA	V _F	1000 1200	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 200V	I _R	100	nA
Typical Diode Capacitance	V _R = 0V, f=1MHz	C _D	5	pF
Reverse Recovery time	I _F =I _R =30mA, I _{RR} =3mA R _L =100Ω	t _{rr}	50	ns
Typical Thermal Resistance		R _{thJC} R _{thJL} R _{thJA}	88 77 190	°C/W

Figure 1. Forward Voltage vs Ambient Temperature

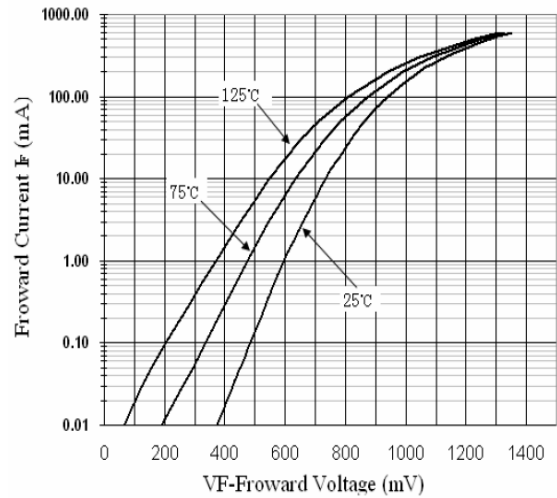


Figure 2. Total Capacitance

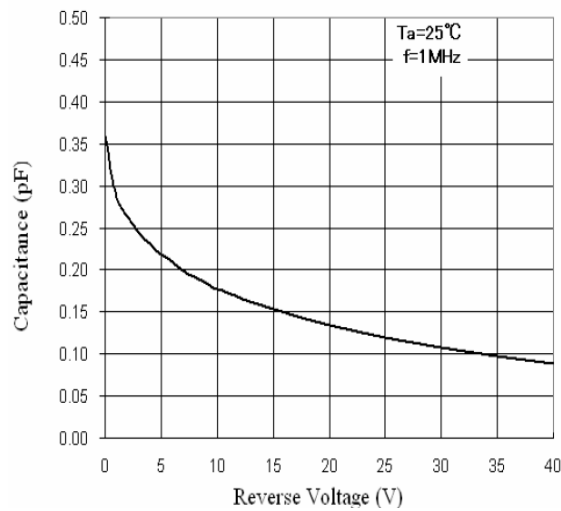


Figure 3. Reverse Voltage vs Reverse Current

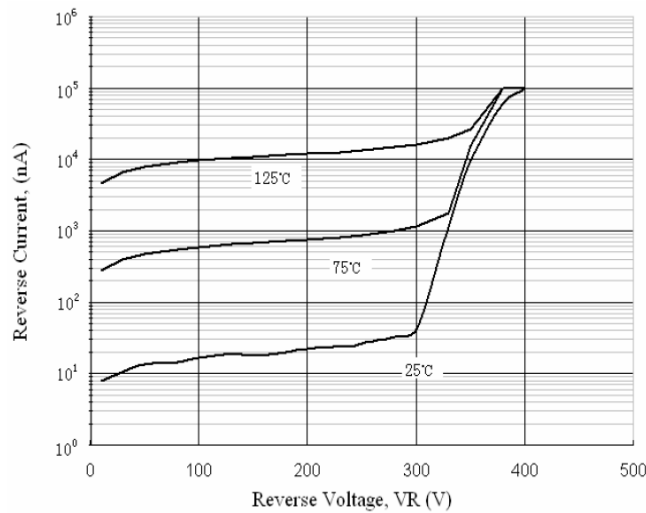
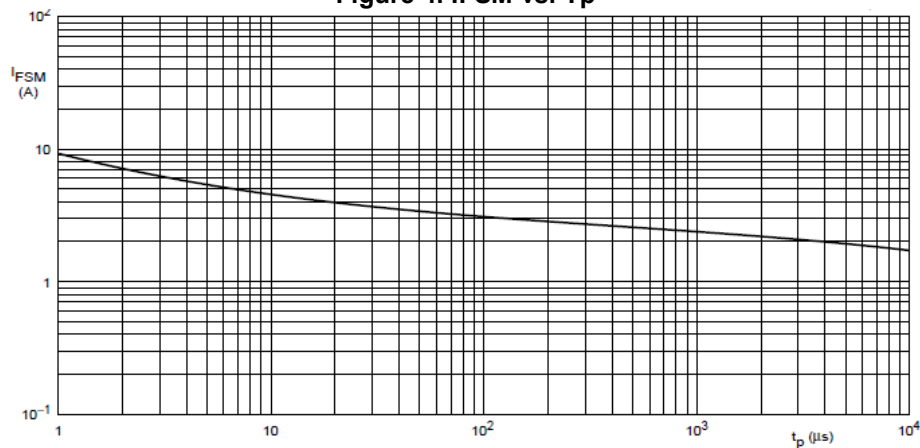



Figure 4. IFSM vs. Tp



Device Marking:

Device P/N	Marking code	Equivalent Circuit Diagram
BAV21WSF	S7	1  2

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